

Amendments to Application no. 10/707,919

Amendments to claims

Claims

1-10 (Canceled)

11. (New) Apparatus for sterilizing air in large volume by radiation of ultraviolet rays, said apparatus comprising: (a) a housing with an inlet guiding air in for sterilizing and an outlet to discharge sterilized air out; (b) a fan means positioned within said housing between said inlet and outlet to cause air movement; (c) a inlet filter means connected with said inlet to remove particles larger than 1um from said air before sterilized; (d) a circuitous sterilizing chamber within said housing to contain said air constructed as continually folding tunnels for the purpose of extending air sterilizing time, connected with said inlet filter and said outlet; (e) a group of UVC lamp tubes positioned inside said circuitous sterilizing chamber to provide high-density ultraviolet radiation to irradiate passing said air.

12. (New) The apparatus of claim 11 wherein said circuitous sterilizing chamber constructed with smooth curved flow guiding interior at every turning section of said circuitous sterilizing chamber to reduce flow resistant.

13. (New) The apparatus of claim 11 wherein said circuitous sterilizing chamber has internal mirror surfaces to increase UVC light reflection and killing power.

14. (New) The apparatus of claim 11 wherein ozone generation from UVC lamp tubes is suppressed by use of non-ozone 253.7nm wavelength germicidal tubes.

15. (New) The apparatus of claim 11 wherein between said chamber and outlet equipped with a filter means to prevent particles larger than the requirement of application getting into distribution airduct.



Michael Liang
Patten Applicant